

ligand binding assay described in the Examples that follow (that is, amino acids 130-434 of the Figure 1 sequence). The invention also includes a protein comprising a domain sharing at least 80% amino acid sequence identity with the ligand binding domain of the Figure 1 sequence, more preferably, at least 85% amino acid sequence identity and, most preferably, at least 90% or 95%, 96%, 97%, 98% or 99% amino acid sequence identity with the ligand binding domain of the Figure 1 sequence (% sequence identity being determined, for example, by Basic Blast (version 2.0) available through the NCBI website), and, advantageously, retaining the function of the Figure 1 sequence.

IN THE CLAIMS

Kindly enter the following amended claims.

- Sub 17
10. (Amended) A method of screening a test compound for its ability to induce cytochrome P-450 3A4 (CYP3A4) gene expression comprising
- i) contacting said test compound with a protein comprised of a ligand binding domain of human pregnane X receptor (hPXR) having the amino acid sequence of SEQ ID NO:14,
 - ii) determining whether said test compound binds to said protein, and
 - iii) determining whether a test compound that binds to said protein induces CYP3A4 gene expression.

Kindly delete claims 1-9 and 11-24 without prejudice or disclaimer.

Kindly enter the following new claims.

25. (New) The method according to claim 10 which is an *in vitro* assay.
26. (New) The method according to claim 10 which is an *in vivo* assay.
27. (New) The method according to claim 10 wherein said protein has an amino acid sequence including amino acids 141 to 434 of SEQ ID NO:14.

28. (New) The method according to claim 10 wherein said protein has an amino acid sequence including amino acids 130 to 434 of SEQ ID NO:14.

29. (New) The method according to claim 10 wherein said protein has an amino acid sequence including SEQ ID NO:14.

30. (New) The method according to claim 10 wherein said protein bears a detectable label.

31. (New) The method according to claim 26 wherein binding of said test compound and said protein occurs in a transformed yeast cell.

32. (New) The method according to claim 26 wherein binding of said test compound and said protein occurs in a transformed bacteria cell.

33. (New) The method according to claim 26 wherein binding of said test compound and said protein occurs in a transformed mammalian cell.

34. (New) The method according to claim 10 wherein said protein is a chimeric receptor.

35. (New) The method according to claim 10 wherein said protein is a fusion protein.

36. (New) The method according to claim 25 wherein said protein is bound to a solid support.

37. (New) The method according to claim 25 wherein binding is determined by separating test compound bound to protein from free test compound and free protein.

38. (New) The method according to claim 10 wherein binding is determined by scintillation proximity assay.

39. (New) The method according to claim 10 wherein binding is determined by competitive binding assay.

40. (Amended) A method of selecting a drug compound which does not induce cytochrome P-450 3A4 (CYP3A4) gene expression comprising

- i) determining whether a drug compound induces CYP3A4 gene expression in the presence of a protein comprised of a ligand binding domain of human pregnane X receptor (hPXR) having the amino acid sequence of SEQ ID NO:14, and
- iii) selecting a drug compound which does not induce CYP3A4 gene expression.